

110TH CONGRESS
1ST SESSION

S. 1115

To promote the efficient use of oil, natural gas, and electricity, reduce oil consumption, and heighten energy efficiency standards for consumer products and industrial equipment, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 16, 2007

Mr. BINGAMAN (for himself, Mr. DOMENICI, Mr. DORGAN, Mr. LUGAR, Mr. AKAKA, Ms. MURKOWSKI, and Mr. CRAIG) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To promote the efficient use of oil, natural gas, and electricity, reduce oil consumption, and heighten energy efficiency standards for consumer products and industrial equipment, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Energy Efficiency Promotion Act of 2007”.

6 (b) TABLE OF CONTENTS.—The table of contents of
7 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Definition of Secretary.

TITLE I—PROMOTING ADVANCED LIGHTING TECHNOLOGIES

- Sec. 101. Accelerated procurement of energy efficient lighting.
- Sec. 102. Incandescent reflector lamp efficiency standards.
- Sec. 103. Bright Tomorrow Lighting Prizes.
- Sec. 104. Sense of Senate concerning efficient lighting standards.

TITLE II—EXPEDITING NEW ENERGY EFFICIENCY STANDARDS

- Sec. 201. Definition of energy conservation standard.
- Sec. 202. Regional standards for heating and cooling products.
- Sec. 203. Furnace fan rulemaking.
- Sec. 204. Expedited rulemakings.
- Sec. 205. Preemption limitation.
- Sec. 206. Energy efficiency labeling for consumer products.
- Sec. 207. Residential boiler efficiency standards.
- Sec. 208. Technical corrections.
- Sec. 209. Electric motor efficiency standards.
- Sec. 210. Energy standards for home appliances.
- Sec. 211. Improved energy efficiency for appliances and buildings in cold climates.
- Sec. 212. Deployment of new technologies for high-efficiency consumer products.

TITLE III—PROMOTING HIGH EFFICIENCY VEHICLES, ADVANCED BATTERIES, AND ENERGY STORAGE

- Sec. 301. Lightweight materials research and development.
- Sec. 302. Loan guarantees for fuel-efficient automobile parts manufacturers.
- Sec. 303. Advanced technology vehicles manufacturing incentive program.
- Sec. 304. Energy storage competitiveness.

TITLE IV—SETTING ENERGY EFFICIENCY GOALS

- Sec. 401. National goals for energy savings in transportation.
- Sec. 402. National energy efficiency improvement goals.
- Sec. 403. Nationwide media campaign to increase energy efficiency.

TITLE V—PROMOTING FEDERAL LEADERSHIP IN ENERGY EFFICIENCY AND RENEWABLE ENERGY

- Sec. 501. Federal fleet conservation requirements.
- Sec. 502. Federal requirement to purchase electricity generated by renewable energy.
- Sec. 503. Energy savings performance contracts.
- Sec. 504. Energy management requirements for Federal buildings.
- Sec. 505. Combined heat and power and district energy installations at Federal sites.
- Sec. 506. Federal building energy efficiency performance standards.
- Sec. 507. Application of International Energy Conservation Code to public and assisted housing.

TITLE VI—ASSISTING STATE AND LOCAL GOVERNMENTS IN ENERGY EFFICIENCY

- Sec. 601. Weatherization assistance for low-income persons.
- Sec. 602. State energy conservation plans.
- Sec. 603. Utility energy efficiency programs.
- Sec. 604. Energy efficiency and demand response program assistance.
- Sec. 605. Energy and environmental block grant.
- Sec. 606. Energy sustainability and efficiency grants for institutions of higher education.
- Sec. 607. Workforce training.
- Sec. 608. Assistance to States to reduce school bus idling.

1 **SEC. 2. DEFINITION OF SECRETARY.**

2 In this Act, the term “Secretary” means the Sec-
3 retary of Energy.

4 **TITLE I—PROMOTING AD-**
5 **VANCED LIGHTING TECH-**
6 **NOLOGIES**

7 **SEC. 101. ACCELERATED PROCUREMENT OF ENERGY EFFI-**
8 **CIENT LIGHTING.**

9 Section 553 of the National Energy Conservation
10 Policy Act (42 U.S.C. 8259b) is amended by adding the
11 following:

12 “(f) ACCELERATED PROCUREMENT OF ENERGY EF-
13 FICIENT LIGHTING.—

14 “(1) IN GENERAL.—Not later than October 1,
15 2010, in accordance with guidelines issued by the
16 Secretary, all general purpose lighting in Federal
17 buildings shall be Energy Star products or products
18 designated under the Federal Energy Management
19 Program.

20 “(2) GUIDELINES.—Not later than 180 days
21 after the date of enactment of this subsection, the

1 Secretary shall issue guidelines to carry out this sub-
 2 section.”.

3 **SEC. 102. INCANDESCENT REFLECTOR LAMP EFFICIENCY**
 4 **STANDARDS.**

5 (a) DEFINITIONS.—Section 321 of the Energy Policy
 6 and Conservation Act (42 U.S.C. 6291) is amended—

7 (1) in paragraph (30)(C)(ii)—

8 (A) in the matter preceding subclause
 9 (I)—

10 (i) by striking “or similar bulb shapes
 11 (excluding ER or BR)” and inserting “ER,
 12 BR, BPAR, or similar bulb shapes”; and

13 (ii) by striking “2.75” and inserting
 14 “2.25”; and

15 (B) by striking “is either—” and all that
 16 follows through subclause (II) and inserting
 17 “has a rated wattage that is 40 watts or high-
 18 er”; and

19 (2) by adding at the end the following:

20 “(52) BPAR INCANDESCENT REFLECTOR
 21 LAMP.—The term ‘BPAR incandescent reflector
 22 lamp’ means a reflector lamp as shown in figure
 23 C78.21–278 on page 32 of ANSI C78.21–2003.

24 “(53) BR INCANDESCENT REFLECTOR LAMP;
 25 BR30; BR40.—

1 “(A) BR INCANDESCENT REFLECTOR
2 LAMP.—The term ‘BR incandescent reflector
3 lamp’ means a reflector lamp that has—

4 “(i) a bulged section below the major
5 diameter of the bulb and above the approx-
6 imate baseline of the bulb, as shown in fig-
7 ure 1 (RB) on page 7 of ANSI C79.1–
8 1994, incorporated by reference in section
9 430.22 of title 10, Code of Federal Regula-
10 tions (as in effect on the date of enactment
11 of this paragraph); and

12 “(ii) a finished size and shape shown
13 in ANSI C78.21–1989, including the ref-
14 erenced reflective characteristics in part 7
15 of ANSI C78.21–1989, incorporated by
16 reference in section 430.22 of title 10,
17 Code of Federal Regulations (as in effect
18 on the date of enactment of this para-
19 graph).

20 “(B) BR30.—The term ‘BR30’ means a
21 BR incandescent reflector lamp with a diameter
22 of 30/8ths of an inch.

23 “(C) BR40.—The term ‘BR40’ means a
24 BR incandescent reflector lamp with a diameter
25 of 40/8ths of an inch.

1 “(54) ER INCANDESCENT REFLECTOR LAMP;
2 ER30; ER40.—

3 “(A) ER INCANDESCENT REFLECTOR
4 LAMP.—The term ‘ER incandescent reflector
5 lamp’ means a reflector lamp that has—

6 “(i) an elliptical section below the
7 major diameter of the bulb and above the
8 approximate baseline of the bulb, as shown
9 in figure 1 (RE) on page 7 of ANSI
10 C79.1–1994, incorporated by reference in
11 section 430.22 of title 10, Code of Federal
12 Regulations (as in effect on the date of en-
13 actment of this paragraph); and

14 “(ii) a finished size and shape shown
15 in ANSI C78.21–1989, incorporated by
16 reference in section 430.22 of title 10,
17 Code of Federal Regulations (as in effect
18 on the date of enactment of this para-
19 graph).

20 “(B) ER30.—The term ‘ER30’ means an
21 ER incandescent reflector lamp with a diameter
22 of 30/8ths of an inch.

23 “(C) ER40.—The term ‘ER40’ means an
24 ER incandescent reflector lamp with a diameter
25 of 40/8ths of an inch.

1 “(55) R20 INCANDESCENT REFLECTOR
2 LAMP.—The term ‘R20 incandescent reflector lamp’
3 means a reflector lamp that has a face diameter of
4 approximately 2.5 inches, as shown in figure 1(R)
5 on page 7 of ANSI C79.1–1994.”.

6 (b) STANDARDS FOR FLUORESCENT LAMPS AND IN-
7 CANDESCENT REFLECTOR LAMPS.—Section 325(i) of the
8 Energy Policy and Conservation Act (42 U.S.C. 6925(i))
9 is amended by striking paragraph (1) and inserting the
10 following:

11 “(1) STANDARDS.—

12 “(A) DEFINITION OF EFFECTIVE DATE.—

13 In this paragraph (other than subparagraph
14 (D)), the term ‘effective date’ means, with re-
15 spect to each type of lamp specified in a table
16 contained in subparagraph (B), the last day of
17 the period of months corresponding to that type
18 of lamp (as specified in the table) that follows
19 October 24, 1992.

20 “(B) MINIMUM STANDARDS.—Each of the
21 following general service fluorescent lamps and
22 incandescent reflector lamps manufactured
23 after the effective date specified in the tables
24 contained in this paragraph shall meet or ex-

1 ceed the following lamp efficacy and CRI stand-
 2 ards:

“FLUORESCENT LAMPS

Lamp Type	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
4-foot medium bi-pin	>35 W	69	75.0	36
	≤35 W	45	75.0	36
2-foot U-shaped	>35 W	69	68.0	36
	≤35 W	45	64.0	36
8-foot slimline	65 W	69	80.0	18
	≤65 W	45	80.0	18
8-foot high output	>100 W	69	80.0	18
	≤100 W	45	80.0	18

“INCANDESCENT REFLECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
40–50	10.5	36
51–66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15.0	36

3 “(C) EXEMPTIONS.—The standards speci-
 4 fied in subparagraph (B) shall not apply to the
 5 following types of incandescent reflector lamps:

6 “(i) Lamps rated at 50 watts or less
 7 that are ER30, BR30, BR40, or ER40
 8 lamps.

9 “(ii) Lamps rated at 65 watts that
 10 are BR30, BR40, or ER40 lamps.

11 “(iii) R20 incandescent reflector
 12 lamps rated 45 watts or less.

13 “(D) EFFECTIVE DATES.—

1 “(i) ER, BR, AND BPAR LAMPS.—The
 2 standards specified in subparagraph (B)
 3 shall apply with respect to ER incandes-
 4 cent reflector lamps, BR incandescent re-
 5 flector lamps, BPAR incandescent reflector
 6 lamps, and similar bulb shapes on and
 7 after January 1, 2008.

8 “(ii) LAMPS BETWEEN 2.25–2.75
 9 INCHES IN DIAMETER.—The standards
 10 specified in subparagraph (B) shall apply
 11 with respect to incandescent reflector
 12 lamps with a diameter of more than 2.25
 13 inches, but not more than 2.75 inches, on
 14 and after January 1, 2008.”.

15 **SEC. 103. BRIGHT TOMORROW LIGHTING PRIZES.**

16 (a) ESTABLISHMENT.—Not later than 1 year after
 17 the date of enactment of this Act, as part of the program
 18 carried out under section 1008 of the Energy Policy Act
 19 of 2005 (42 U.S.C. 16396), the Secretary shall establish
 20 and award Bright Tomorrow Lighting Prizes for solid
 21 state lighting in accordance with this section.

22 (b) PRIZE SPECIFICATIONS.—

23 (1) 60-WATT INCANDESCENT REPLACEMENT
 24 LAMP PRIZE.—The Secretary shall award a 60-Watt
 25 Incandescent Replacement Lamp Prize to an entrant

1 that produces a solid-state light package simulta-
2 neously capable of—

3 (A) producing a luminous flux greater than
4 900 lumens;

5 (B) consuming less than or equal to 10
6 watts;

7 (C) having an efficiency greater than 90
8 lumens per watt;

9 (D) having a color rendering index greater
10 than 90;

11 (E) having a correlated color temperature
12 of not less than 2,750, and not more than
13 3,000, degrees Kelvin;

14 (F) having a lifetime exceeding 25,000
15 hours under typical conditions expected in resi-
16 dential use;

17 (G) having a light distribution pattern
18 similar to a soft 60-watt incandescent A19
19 bulb;

20 (H) having a size and shape similar to a
21 60-watt incandescent A19 bulb in accordance
22 with American National Standards Institute
23 standard C78.20–2003, figure C78.20–211;

24 (I) using an incandescent bulb power re-
25 ceptacle; and

1 (J) mass production for a competitive sales
2 commercial market satisfied by the submission
3 of 10,000 such units equal to or exceeding the
4 criteria described in subparagraphs (A) through
5 (I).

6 (2) PAR TYPE 38 HALOGEN REPLACEMENT
7 LAMP PRIZE.—The Secretary shall award a
8 Parabolic Aluminized Reflector Type 38 Halogen
9 Replacement Lamp Prize (referred to in this section
10 as the “PAR Type 38 Halogen Replacement Lamp
11 Prize”) to an entrant that produces a solid-state-
12 light package simultaneously capable of—

13 (A) producing a luminous flux greater than
14 or equal to 1,350 lumens;

15 (B) consuming less than or equal to 10
16 watts;

17 (C) having an efficiency greater than 90
18 lumens per watt;

19 (D) having a color rendering index greater
20 than or equal to 90;

21 (E) having a correlated color coordinate
22 temperature of not less than 2,750, and not
23 more than 3,000, degrees Kelvin;

1 (F) having a lifetime exceeding 25,000
2 hours under typical conditions expected in resi-
3 dential use;

4 (G) having a light distribution pattern
5 similar to a PAR 38 halogen lamp;

6 (H) having a size and shape that fits with-
7 in the maximum dimensions of a PAR 38 halo-
8 gen lamp in accordance with American National
9 Standards Institute standard C78-21-2003,
10 figure C78.21-238;

11 (I) using a PAR 38 halogen power recep-
12 tacle; and

13 (J) mass production for a competitive sales
14 commercial market satisfied by the submission
15 of 10,000 such units equal to or exceeding the
16 criteria described in subparagraphs (A) through
17 (I).

18 (3) TWENTY-FIRST CENTURY LAMP PRIZE.—

19 The Secretary shall award a Twenty-First Century
20 Lamp Prize to an entrant that produces a solid-
21 state-light-light capable of—

22 (A) producing a light output greater than
23 1,200 lumens;

24 (B) having an efficiency greater than 150
25 lumens per watt;

1 (C) having a color rendering index greater
2 than 90;

3 (D) having a color coordinate temperature
4 between 2,800 and 3,000 degrees Kelvin; and

5 (E) having a lifetime exceeding 25,000
6 hours.

7 (c) PRIVATE FUNDS.—The Secretary may accept and
8 use funding from private sources as part of the prizes
9 awarded under this section.

10 (d) TECHNICAL REVIEW.—The Secretary shall estab-
11 lish a technical review committee composed of non-Federal
12 officers to review entrant data submitted under this sec-
13 tion to determine whether the data meets the prize speci-
14 fications described in subsection (b).

15 (e) THIRD PARTY ADMINISTRATION.—The Secretary
16 may competitively select a third party to administer
17 awards under this section.

18 (f) AWARD AMOUNTS.—Subject to the availability of
19 funds to carry out this section, the amount of—

20 (1) the 60-Watt Incandescent Replacement
21 Lamp Prize described in subsection (b)(1) shall be
22 \$10,000,000;

23 (2) the PAR Type 38 Halogen Replacement
24 Lamp Prize described in subsection (b)(2) shall be
25 \$5,000,000; and

1 (3) the Twenty-First Century Lamp Prize de-
2 scribed in subsection (b)(3) shall be \$5,000,000.

3 (g) FEDERAL PROCUREMENT OF SOLID-STATE-
4 LIGHTS.—

5 (1) 60-WATT INCANDESCENT REPLACEMENT.—

6 Subject to paragraph (3), as soon as practicable
7 after the successful award of the 60-Watt Incandes-
8 cent Replacement Lamp Prize under subsection
9 (b)(1), the Secretary (in consultation with the Ad-
10 ministrator of General Services) shall develop gov-
11 ernmentwide Federal purchase guidelines with a goal
12 of replacing the use of 60-watt incandescent lamps
13 in Federal Government buildings with a solid-state-
14 light package described in subsection (b)(1) by not
15 later than the date that is 5 years after the date the
16 award is made.

17 (2) PAR 38 HALOGEN REPLACEMENT LAMP RE-
18 PLACEMENT.—Subject to paragraph (3), as soon as
19 practicable after the successful award of the PAR
20 Type 38 Halogen Replacement Lamp Prize under
21 subsection (b)(2), the Secretary (in consultation with
22 the Administrator of General Services) shall develop
23 governmentwide Federal purchase guidelines with
24 the goal of replacing the use of PAR 38 halogen
25 lamps in Federal Government buildings with a solid-

1 state-light package described in subsection (b)(2) by
2 not later than the date that is 5 years after the date
3 the award is made.

4 (3) WAIVERS.—

5 (A) IN GENERAL.—The Secretary or the
6 Administrator of General Services may waive
7 the application of paragraph (1) or (2) if the
8 Secretary or Administrator determines that the
9 return on investment from the purchase of a
10 solid-state-light package described in paragraph
11 (1) or (2) of subsection (b), respectively, is cost
12 prohibitive.

13 (B) REPORT OF WAIVER.—If the Secretary
14 or Administrator waives the application of para-
15 graph (1) or (2), the Secretary or Adminis-
16 trator, respectively, shall submit to Congress an
17 annual report that describes the waiver and
18 provides a detailed justification for the waiver.

19 (h) BRIGHT LIGHT TOMORROW AWARD FUND.—

20 (1) ESTABLISHMENT.—There is established in
21 the United States Treasury a Bright Light Tomor-
22 row permanent fund without fiscal year limitation to
23 award prizes under paragraphs (1), (2), and (3) of
24 subsection (b).

1 (2) SOURCES OF FUNDING.—The fund estab-
 2 lished under paragraph (1) shall accept—

3 (A) fiscal year appropriations; and

4 (B) private contributions authorized under
 5 subsection (c).

6 (i) AUTHORIZATION OF APPROPRIATIONS.—There
 7 are authorized to be appropriated such sums as are nec-
 8 essary to carry out this section.

9 **SEC. 104. SENSE OF SENATE CONCERNING EFFICIENT**
 10 **LIGHTING STANDARDS.**

11 (a) FINDINGS.—The Senate finds that—

12 (1) there are approximately 4,000,000,000
 13 screw-based sockets in the United States that con-
 14 tain traditional, energy-inefficient, incandescent light
 15 bulbs;

16 (2) incandescent light bulbs are based on tech-
 17 nology that is more than 125 years old;

18 (3) there are radically more efficient lighting al-
 19 ternatives in the market, with the promise of even
 20 more choices over the next several years;

21 (4) national policy can support a rapid substi-
 22 tution of new, energy-efficient light bulbs for the less
 23 efficient products in widespread use; and,

24 (5) transforming the United States market to
 25 use of more efficient lighting technologies can—

1 (A) reduce electric costs in the United
2 States by more than \$18,000,000,000 annually;

3 (B) save the equivalent electricity that is
4 produced by 80 base load coal-fired power
5 plants; and

6 (C) reduce fossil fuel related emissions by
7 approximately 158,000,000 tons each year.

8 (b) SENSE OF THE SENATE.—It is the sense of the
9 Senate that the Senate should—

10 (1) pass a set of mandatory, technology-neutral
11 standards to establish firm energy efficiency per-
12 formance targets for lighting products;

13 (2) ensure that the standards become effective
14 within the next 10 years; and

15 (3) in developing the standards—

16 (A) establish the efficiency requirements to
17 ensure that replacement lamps will provide con-
18 sumers with the same quantity of light while
19 using significantly less energy;

20 (B) ensure that consumers will continue to
21 have multiple product choices, including energy-
22 saving halogen, incandescent, compact fluores-
23 cent, and LED light bulbs; and

24 (C) work with industry and key stake-
25 holders on measures that can assist consumers

1 and businesses in making the important transi-
 2 tion to more efficient lighting.

3 **TITLE II—EXPEDITING NEW EN-**
 4 **ERGY EFFICIENCY STAND-**
 5 **ARDS**

6 **SEC. 201. DEFINITION OF ENERGY CONSERVATION STAND-**
 7 **ARD.**

8 Section 321 of the Energy Policy and Conservation
 9 Act (42 U.S.C. 6291) is amended by striking paragraph
 10 (6) and inserting the following:

11 “(6) ENERGY CONSERVATION STANDARD.—

12 “(A) IN GENERAL.—The term ‘energy con-
 13 servation standard’ means—

14 “(i) 1 or more performance standards
 15 that prescribe a minimum level of energy
 16 efficiency or a maximum quantity of en-
 17 ergy use, and, in the case of a showerhead,
 18 faucet, water closet, urinal, clothes washer,
 19 and dishwasher, water use, for a covered
 20 product, determined in accordance with
 21 test procedures prescribed under section
 22 323; and

23 “(ii) 1 or more design requirements.

24 “(B) INCLUSIONS.—The term ‘energy con-
 25 servation standard’ includes any other require-

1 ments that the Secretary may prescribe under
2 subsections (o) and (r) of section 325.”.

3 **SEC. 202. REGIONAL STANDARDS FOR HEATING AND COOL-**
4 **ING PRODUCTS.**

5 Section 325(o) of the Energy Policy and Conserva-
6 tion Act (42 U.S.C. 6295(o)) is amended by adding at
7 the end the following:

8 “(6) REGIONAL STANDARDS FOR HEATING AND
9 COOLING PRODUCTS.—

10 “(A) IN GENERAL.—Notwithstanding any
11 other provision of this section, the Secretary
12 may establish regional standards for space
13 heating and air conditioning products.

14 “(B) MAXIMUM NUMBER OF REGIONS.—
15 For each space heating and air conditioning
16 product, the Secretary may establish not more
17 than 3 regions with differing standards.

18 “(C) BOUNDARIES OF REGIONS.—

19 “(i) IN GENERAL.—The Secretary
20 shall establish the regions so as to achieve
21 the maximum level of energy savings that
22 are technically feasible and economically
23 justifiable.

24 “(ii) STATE BOUNDARIES.—Bound-
25 aries for a region shall conform to State

1 borders and only include contiguous States
 2 (other than Alaska and Hawaii, which
 3 shall be noncontiguous).

4 “(D) FACTORS FOR ESTABLISHMENT.—In
 5 deciding whether to establish 1 or more regional
 6 standards for space heating and air condi-
 7 tioning equipment, the Secretary shall consider
 8 all of the factors described in paragraphs (1)
 9 through (4).”.

10 **SEC. 203. FURNACE FAN RULEMAKING.**

11 Section 325(f)(3) of the Energy Policy and Conserva-
 12 tion Act (42 U.S.C. 6295(f)(3)) is amended by adding at
 13 the end the following:

14 “(E) FINAL RULE.—

15 “(i) IN GENERAL.—The Secretary
 16 shall publish a final rule to carry out this
 17 subsection not later than December 31,
 18 2012.

19 “(ii) CRITERIA.—The standards shall
 20 meet the criteria established under sub-
 21 section (o).”.

22 **SEC. 204. EXPEDITED RULEMAKINGS.**

23 Section 325 of the Energy Policy and Conservation
 24 Act (42 U.S.C. 6295) is amended by adding at the end
 25 the following:

1 “(hh) EXPEDITED RULEMAKING FOR CONSENSUS
2 STANDARDS.—

3 “(1) IN GENERAL.—The Secretary shall con-
4 duct an expedited rulemaking based on an energy
5 conservation standard or test procedure rec-
6 ommended by interested persons, if—

7 “(A) the interested persons (demonstrating
8 significant and broad support from manufactur-
9 ers of a covered product, States, and environ-
10 mental, energy efficiency, and consumer advo-
11 cates) submit a joint comment recommending a
12 consensus energy conservation standard or test
13 procedure; and

14 “(B) the Secretary determines that the
15 joint comment includes evidence that (assuming
16 no other evidence were considered) provides an
17 adequate basis for determining that the pro-
18 posed consensus energy conservation standard
19 or test procedure proposed in the joint comment
20 complies with the provisions and criteria of this
21 Act (including subsection o)) that apply to the
22 type or class of covered products covered by the
23 joint comment.

24 “(2) PROCEDURE.—

1 “(A) IN GENERAL.—Notwithstanding sub-
2 section (p) or section 336(a), if the Secretary
3 receives a joint comment that meets the criteria
4 described in paragraph (1), the Secretary shall
5 conduct an expedited rulemaking with respect
6 to the standard or test procedure proposed in
7 the joint comment in accordance with this para-
8 graph.

9 “(B) ADVANCED NOTICE OF PROPOSED
10 RULEMAKING.—If no advanced notice of pro-
11 posed rulemaking has been issued under sub-
12 section (p)(1) with respect to the rulemaking
13 covered by the joint comment, the requirements
14 of subsection (p) with respect to the issuance of
15 an advanced notice of proposed rulemaking
16 shall not apply.

17 “(C) PUBLICATION OF DETERMINATION.—
18 Not later than 60 days after receipt of a joint
19 comment described in paragraph (1)(A), the
20 Secretary shall publish a description of a deter-
21 mination as to whether the proposed standard
22 or test procedure covered by the joint comment
23 meets the criteria described in paragraph (1).

24 “(D) PROPOSED RULE.—

1 “(i) PUBLICATION.—If the Secretary
2 determines that the proposed consensus
3 standard or test procedure covered by the
4 joint comment meets the criteria described
5 in paragraph (1), not later than 30 days
6 after the determination, the Secretary shall
7 publish a proposed rule proposing the con-
8 sensus standard or test procedure covered
9 by the joint comment.

10 “(ii) PUBLIC COMMENT PERIOD.—
11 Notwithstanding paragraphs (2) and (3) of
12 subsection (p), the public comment period
13 for the proposed rule shall be the 30-day
14 period beginning on the date of the publi-
15 cation of the proposed rule in the Federal
16 Register.

17 “(iii) PUBLIC HEARING.—Notwith-
18 standing section 336(a), the Secretary may
19 waive the holding of a public hearing with
20 respect to the proposed rule.

21 “(E) FINAL RULE.—Notwithstanding sub-
22 section (p)(4), the Secretary—

23 “(i) may publish a final rule at any
24 time after the 60-day period beginning on

1 the date of publication of the proposed rule
 2 in the Federal Register; and
 3 “(ii) shall publish a final rule not
 4 later than 120 days after the date of publi-
 5 cation of the proposed rule in the Federal
 6 Register.”.

7 **SEC. 205. PREEMPTION LIMITATION.**

8 Section 327 of the Energy Policy and Conservation
 9 Act (42 U.S.C. 6297) is amended—

10 (1) in subsection (b)—

11 (A) in paragraph (6), by striking “or” at
 12 the end;

13 (B) in paragraph (7), by striking the pe-
 14 riod at the end and inserting “; or”; and

15 (C) by adding at the end the following:

16 “(8) is a State regulation for a product for
 17 which a Federal energy conservation standard has
 18 not been established, in that—

19 “(A) the product is excluded from or not
 20 directly affected by a Federal standard; or

21 “(B) a rulemaking occurs that ultimately
 22 does not prescribe a Federal energy conserva-
 23 tion standard for the product.”; and

24 (2) in subsection (c)—

1 (A) in paragraph (8), by striking the pe-
 2 riod at the end and inserting “; or”; and

3 (B) by adding at the end the following:

4 “(9) is a State regulation for a product for
 5 which a Federal energy conservation standard has
 6 not been established, in that—

7 “(A) the product is excluded from or not
 8 directly affected by a Federal standard; or

9 “(B) a rulemaking occurs that ultimately
 10 does not prescribe a Federal energy conserva-
 11 tion standard for the product.”.

12 **SEC. 206. ENERGY EFFICIENCY LABELING FOR CONSUMER**
 13 **PRODUCTS.**

14 (a) IN GENERAL.—Not later than 18 months after
 15 the date of enactment of this Act, the Federal Trade Com-
 16 mission, in consultation with the Secretary and the Ad-
 17 ministrator of the Environmental Protection Agency (act-
 18 ing through the Energy Star program), shall promulgate
 19 regulations to add the consumer electronics product cat-
 20 egories described in subsection (b) to the Energy Guide
 21 labeling program of the Commission.

22 (b) CONSUMER ELECTRONICS PRODUCT CAT-
 23 EGORIES.—The consumer electronics product categories
 24 referred to in subsection (a) are the following:

25 (1) Televisions.

1 (2) Personal computers.

2 (3) Cable or satellite set-top boxes.

3 (4) Stand-alone digital video recorder boxes (in-
4 cluding TIVO and similar branded products).

5 (5) Computer monitors.

6 (c) LABEL PLACEMENT.—The regulations shall in-
7 clude specific requirements for each product on the place-
8 ment of Energy Guide labels.

9 (d) DEADLINE FOR LABELING.—Not later than 1
10 year after the date of promulgation of regulations under
11 subsection (a), the Commission shall require labeling elec-
12 tronic products described in subsection (b) in accordance
13 with this section (including the regulations).

14 (e) AUTHORITY TO INCLUDE ADDITIONAL PRODUCT
15 CATEGORIES.—The Commission may add additional prod-
16 uct categories to the Energy Guide labeling program if
17 the product categories include products, as determined by
18 the Commission—

19 (1) that have an annual energy use in excess of
20 100 kilowatt hours per year; and

21 (2) for which there is a significant difference in
22 energy use between the most and least efficient
23 products.

1 **SEC. 207. RESIDENTIAL BOILER EFFICIENCY STANDARDS.**

2 Section 325(f) of the Energy Policy and Conservation
3 Act (42 U.S.C. 6295(f)) is amended—

4 (1) by redesignating paragraph (3) as para-
5 graph (4); and

6 (2) by inserting after paragraph (2) the fol-
7 lowing:

8 “(3) BOILERS.—

9 “(A) IN GENERAL.—Subject to subpara-
10 graphs (B) and (C), boilers manufactured on or
11 after September 1, 2012, shall meet the fol-
12 lowing requirements:

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Gas Hot Water	82%	No Constant Burning Pilot, Automatic Means for Adjusting Water Temperature
Gas Steam	80%	No Constant Burning Pilot
Oil Hot Water	84%	Automatic Means for Adjusting Temperature
Oil Steam	82%	None
Electric Hot Water	None	Automatic Means for Adjusting Temperature
Electric Steam	None	None

13 “(B) PILOTS.—The manufacturer shall not
14 equip gas hot water or steam boilers with con-
15 stant-burning pilot lights.

16 “(C) AUTOMATIC MEANS FOR ADJUSTING
17 WATER TEMPERATURE.—

1 “(i) IN GENERAL.—The manufacturer
2 shall equip each gas, oil, and electric hot
3 water boiler (other than a boiler equipped
4 with tankless domestic water heating coils)
5 with an automatic means for adjusting the
6 temperature of the water supplied by the
7 boiler to ensure that an incremental
8 change in inferred heat load produces a
9 corresponding incremental change in the
10 temperature of water supplied.

11 “(ii) CERTAIN BOILERS.—For a boiler
12 that fires at 1 input rate, the requirements
13 of this subparagraph may be satisfied by
14 providing an automatic means that allows
15 the burner or heating element to fire only
16 when the means has determined that the
17 inferred heat load cannot be met by the re-
18 sidual heat of the water in the system.

19 “(iii) NO INFERRED HEAT LOAD.—
20 When there is no inferred heat load with
21 respect to a hot water boiler, the automatic
22 means described in clauses (i) and (ii)
23 shall limit the temperature of the water in
24 the boiler to not more than 140 degrees
25 Fahrenheit.

1 “(iv) OPERATION.—A boiler described
 2 in clause (i) or (ii) shall be operable only
 3 when the automatic means described in
 4 clauses (i), (ii), and (iii) is installed.”.

5 **SEC. 208. TECHNICAL CORRECTIONS.**

6 Section 321(30)(B)(viii) of the Energy Policy and
 7 Conservation Act (42 U.S.C. 6291(30)(B)(viii)) is amend-
 8 ed by striking “82” and inserting “87”.

9 **SEC. 209. ELECTRIC MOTOR EFFICIENCY STANDARDS.**

10 (a) DEFINITIONS.—Section 340(13) of the Energy
 11 Policy and Conservation Act (42 U.S.C. 6311(13)) is
 12 amended by striking subparagraph (A) and inserting the
 13 following:

14 “(A)(i) The term ‘electric motor’ means—

15 “(I) a general purpose electric motor—
 16 subtype I; and

17 “(II) a general purpose electric motor—
 18 subtype II.

19 “(ii) The term ‘general purpose electric
 20 motor—subtype I’ means any motor that is consid-
 21 ered a general purpose motor under section 431.12
 22 of title 10, Code of Federal Regulations (or suc-
 23 cessor regulations).

24 “(iii) The term ‘general purpose electric
 25 motor—subtype II’ means a motor that, in addition

to the design elements for a general purpose electric motor—subtype I, incorporates the design elements (as established in National Electrical Manufacturers Association MG–1 (2006)) (or successor design elements) for any of the following:

“(I) A U-Frame Motor.

“(II) A Design C Motor.

“(III) A close-coupled pump motor.

“(IV) A footless motor.

“(V) A vertical solid shaft normal thrust (tested in a horizontal configuration).

“(VI) An 8-pole motor.

“(VII) A poly-phase motor with voltage of not more than 600 volts (other than 230 or 460 volts).”.

(b) STANDARDS.—Section 342(b) of the Energy Policy and Conservation Act (42 U.S.C. 6313(13)) is amended by striking paragraph (1) and inserting the following:

“(1) STANDARDS.—

“(A) GENERAL PURPOSE ELECTRIC MOTORS—SUBTYPE I.—

“(i) IN GENERAL.—Except as otherwise provided in this subparagraph, a general purpose electric motor—subtype I with a power rating of not less than 1, and

not more than 200, horsepower manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of this subparagraph, shall have a nominal full load efficiency established in Table 12-12 of National Electrical Manufacturers Association (referred to in this paragraph as ‘NEMA’) MG-1 (2006) (or a successor table).

“(ii) FIRE PUMP MOTORS.—A fire pump motor shall have a nominal full load efficiency established in Table 12-11 of NEMA MG-1 (2006) (or a successor table).

“(B) GENERAL PURPOSE ELECTRIC MOTORS—SUBTYPE II .—A general purpose electric motor—subtype II with a power rating of not less than 1, and not more than 200, horsepower manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of this subparagraph, shall have a nominal full load efficiency established in Table 12-11 of NEMA MG-1 (2006) (or a successor table).

1 “(C) DESIGN B, GENERAL PURPOSE ELEC-
 2 TRIC MOTORS.—A NEMA Design B, general
 3 purpose electric motor with a power rating of
 4 not less than 201, and not more than 500,
 5 horsepower manufactured (alone or as a compo-
 6 nent of another piece of equipment) after the 3-
 7 year period beginning on the date of the enact-
 8 ment of this subparagraph shall have a nominal
 9 full load efficiency established in Table 12–11
 10 of NEMA MG–1 (2006) (or a successor
 11 table).”.

12 (c) EFFECTIVE DATE.—The amendments made by
 13 this section take effect on the date that is 3 years after
 14 the date of enactment of this Act.

15 **SEC. 210. ENERGY STANDARDS FOR HOME APPLIANCES.**

16 (a) DEFINITION OF ENERGY CONSERVATION STAND-
 17 ARD.—Section 321(6)(A) of the Energy Policy and Con-
 18 servation Act (42 U.S.C. 6291(6)(A)) is amended by strik-
 19 ing “or, in the case of” and inserting “and, in the case
 20 of residential clothes washers, residential dishwashers,”.

21 (b) REFRIGERATORS, REFRIGERATOR-FREEZERS,
 22 AND FREEZERS.—Section 325(b) of the Energy Policy
 23 and Conservation Act (42 U.S.C. 6295(b)) is amended by
 24 adding at the end the following:

1 “(4) REFRIGERATORS, REFRIGERATOR-FREEZ-
 2 ERS, AND FREEZERS MANUFACTURED ON OR AFTER
 3 JANUARY 1, 2014.—Not later than December 31,
 4 2010, the Secretary shall publish a final rule deter-
 5 mining whether to amend the standards in effect for
 6 refrigerators, refrigerator-freezers, and freezers
 7 manufactured on or after January 1, 2014, and in-
 8 cluding any amended standards.”.

9 (c) RESIDENTIAL CLOTHES WASHERS AND DISH-
 10 WASHERS.—Section 325(g)(4) of the Energy Policy and
 11 Conservation Act (42 U.S.C. 6295(g)(4)) is amended by
 12 adding at the end the following:

13 “(D) CLOTHES WASHERS.—

14 “(i) CLOTHES WASHERS MANUFAC-
 15 TURED ON OR AFTER JANUARY 1, 2011.—
 16 A residential clothes washer manufactured
 17 on or after January 1, 2011, shall have—

18 “(I) an energy factor of at least
 19 1.26; and

20 “(II) a water factor of not more
 21 than 9.5.

22 “(ii) CLOTHES WASHERS MANUFAC-
 23 TURED ON OR AFTER JANUARY 1, 2015.—
 24 Not later than December 31, 2011, the
 25 Secretary shall publish a final rule deter-

1 mining whether to amend the standards in
2 effect for residential clothes washers manu-
3 factured on or after January 1, 2015, and
4 including any amended standards.

5 “(E) DISHWASHERS.—

6 “(i) DISHWASHERS MANUFACTURED
7 ON OR AFTER JANUARY 1, 2010.—A dish-
8 washer manufactured on or after January
9 2, 2010, shall use not more than—

10 “(I) in the case of a standard-
11 size dishwasher, 355 kWh per year or
12 6.5 gallons of water per cycle; and

13 “(II) in the case of a compact-
14 size dishwasher, 260 kWh per year or
15 4.5 gallons of water per cycle.

16 “(ii) DISHWASHERS MANUFACTURED
17 ON OR AFTER JANUARY 1, 2018.—Not later
18 than December 31, 2015, the Secretary
19 shall publish a final rule determining
20 whether to amend the standards for dish-
21 washers manufactured on or after January
22 2, 2018, and including any amended
23 standards.”.

(d) DEHUMIDIFIERS.—Section 325(cc) of the Energy Policy and Conservation Act (42 U.S.C. 6295(cc)) is amended—

(1) in paragraph (1), by inserting “and before October 1, 2012,” after “2007,”; and

(2) by striking paragraph (2) and inserting the following:

“(2) DEHUMIDIFIERS MANUFACTURED ON OR AFTER OCTOBER 1, 2012.—Dehumidifiers manufactured on or after October 1, 2012, shall have an Energy Factor that meets or exceeds the following values:

Product Capacity (pints/day):	Minimum Energy Factor liters/kWh
Up to 35.00	1.35
35.01–45.00	1.50
45.01–54.00	1.60
54.01–75.00	1.70
Greater than 75.00	2.5.”

(e) ENERGY STAR PROGRAM.—Section 324A(d)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6294a(d)(2)) is amended by striking “2010” and inserting “2009”.

SEC. 211. IMPROVED ENERGY EFFICIENCY FOR APPLIANCES AND BUILDINGS IN COLD CLIMATES.

(a) RESEARCH.—Section 911(a)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16191(a)(2)) is amended—

1 (1) in subparagraph (C), by striking “and” at
2 the end;

3 (2) in subparagraph (D), by striking the period
4 at the end and inserting “; and”; and

5 (3) by adding at the end the following:

6 “(E) technologies to improve the energy ef-
7 ficiency of appliances and mechanical systems
8 for buildings in cold climates, including in-
9 creased use of renewable resources, including
10 fuel.”.

11 (b) REBATES.—Section 124 of the Energy Policy Act
12 of 2005 (42 U.S.C. 15821) is amended—

13 (1) in subsection (b)(1), by inserting “, or prod-
14 ucts with improved energy efficiency in cold cli-
15 mates,” after “residential Energy Star products”;
16 and

17 (2) in subsection (e), by inserting “or product
18 with improved energy efficiency in a cold climate”
19 after “residential Energy Star product” each place
20 it appears.

21 **SEC. 212. DEPLOYMENT OF NEW TECHNOLOGIES FOR**
22 **HIGH-EFFICIENCY CONSUMER PRODUCTS.**

23 (a) DEFINITIONS.—In this section:

24 (1) ENERGY SAVINGS.—The term “energy sav-
25 ings” means megawatt-hours of electricity or million

1 British thermal units of natural gas saved by a
2 product, in comparison to projected energy consump-
3 tion under the energy efficiency standard applicable
4 to the product.

5 (2) HIGH-EFFICIENCY CONSUMER PRODUCT.—

6 The term “high-efficiency consumer product” means
7 a product that exceeds the energy efficiency of com-
8 parable products available in the market by at least
9 25 percent.

10 (b) FINANCIAL INCENTIVES PROGRAM.—Effective
11 beginning October 1, 2007, the Secretary shall competi-
12 tively award financial incentives under this section for the
13 manufacture of high-efficiency consumer products.

14 (c) REQUIREMENTS.—

15 (1) IN GENERAL.—The Secretary shall make
16 awards under this section to manufacturers of high-
17 efficiency consumer products, based on the bid of
18 each manufacturer in terms of dollars per megawatt-
19 hour or million British thermal units saved.

20 (2) ACCEPTANCE OF BIDS.—In making awards
21 under this section, the Secretary shall—

22 (A) solicit bids for reverse auction from
23 appropriate manufacturers, as determined by
24 the Secretary; and

1 (B) award financial incentives to the man-
 2 ufacturers that submit the lowest bids that
 3 meet the requirements established by the Sec-
 4 retary.

5 (d) FORMS OF AWARDS.—An award for a high-effi-
 6 ciency consumer product under this section shall be in the
 7 form of a lump sum payment in an amount equal to the
 8 product obtained by multiplying—

9 (1) the amount of the bid by the manufacturer
 10 of the high-efficiency consumer product; and

11 (2) the energy savings during the projected use-
 12 ful life of the high-efficiency consumer product, not
 13 to exceed 10 years, as determined under regulations
 14 issued by the Secretary.

15 **TITLE III—PROMOTING HIGH EF-**
 16 **FICIENCY VEHICLES, AD-**
 17 **VANCED BATTERIES, AND EN-**
 18 **ERGY STORAGE**

19 **SEC. 301. LIGHTWEIGHT MATERIALS RESEARCH AND DE-**
 20 **VELOPMENT.**

21 (a) IN GENERAL.—As soon as practicable after the
 22 date of enactment of this Act, the Secretary shall establish
 23 a research and development program to determine ways
 24 in which—

1 (1) the weight of vehicles may be reduced to im-
2 prove fuel efficiency without compromising pas-
3 senger safety; and

4 (2) the cost of lightweight materials (such as
5 steel alloys and carbon fibers) required for the con-
6 struction of lighter-weight vehicles may be reduced.

7 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
8 authorized to be appropriated to carry out this section
9 \$60,000,000 for each of fiscal years 2007 through 2012.

10 **SEC. 302. LOAN GUARANTEES FOR FUEL-EFFICIENT AUTO-**
11 **MOBILE PARTS MANUFACTURERS.**

12 (a) IN GENERAL.—Section 712(a) of the Energy Pol-
13 icy Act of 2005 (42 U.S.C. 16062(a)) is amended in the
14 second sentence by striking “grants to automobile manu-
15 facturers” and inserting “grants and loan guarantees
16 under section 1703 to automobile manufacturers and sup-
17 pliers”.

18 (b) CONFORMING AMENDMENT.—Section 1703(b) of
19 the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is
20 amended by by striking paragraph (8) and inserting the
21 following:

22 “(8) Production facilities for the manufacture
23 of fuel efficient vehicles or parts of those vehicles,
24 including electric drive transportation technology
25 and advanced diesel vehicles.”.

1 **SEC. 303. ADVANCED TECHNOLOGY VEHICLES MANUFAC-**
2 **TURING INCENTIVE PROGRAM.**

3 (a) DEFINITIONS.—In this section:

4 (1) ADJUSTED AVERAGE FUEL ECONOMY.—The
5 term “adjusted average fuel economy” means the av-
6 erage fuel economy of a manufacturer for all light
7 duty vehicles produced by the manufacturer, ad-
8 justed such that the fuel economy of each vehicle
9 that qualifies for an award shall be considered to be
10 equal to the average fuel economy for vehicles of a
11 similar footprint for model year 2002.

12 (2) ADVANCED TECHNOLOGY VEHICLE.—The
13 term “advanced technology vehicle” means a light
14 duty vehicle that meets—

15 (A) the Bin 5 Tier II emission standard
16 established in regulations issued by the Admin-
17 istrator of the Environmental Protection Agen-
18 cy under section 202(i) of the Clean Air Act
19 (42 U.S.C. 7521(i)), or a lower-numbered Bin
20 emission standard;

21 (B) any new emission standard for fine
22 particulate matter prescribed by the Adminis-
23 trator under that Act (42 U.S.C. 7401 et seq.);
24 and

1 (C) at least 125 percent of the average
2 base year combined fuel economy for vehicles of
3 a substantially similar footprint.

4 (3) COMBINED FUEL ECONOMY.—The term
5 “combined fuel economy” means—

6 (A) the combined city/highway miles per
7 gallon values, as reported in accordance with
8 section 32908 of title 49, United States Code;
9 and

10 (B) in the case of an electric drive vehicle
11 with the ability to recharge from an off-board
12 source, the reported mileage, as determined in
13 a manner consistent with the Society of Auto-
14 motive Engineers Recommended Practice
15 J1711 or a similar practice recommended by
16 the Secretary.

17 (4) ENGINEERING INTEGRATION COSTS.—The
18 term “engineering integration costs” includes the
19 cost of engineering tasks relating to—

20 (A) incorporating qualifying components
21 into the design of advanced technology vehicles;
22 and

23 (B) designing new tooling and equipment
24 for production facilities that produce qualifying
25 components or advanced technology vehicles.

1 (5) QUALIFYING COMPONENTS.—The term
2 “qualifying components” means components that the
3 Secretary determines to be—

4 (A) specially designed for advanced tech-
5 nology vehicles; and

6 (B) installed for the purpose of meeting
7 the performance requirements of advanced tech-
8 nology vehicles.

9 (b) MANUFACTURER FACILITY CONVERSION
10 AWARDS.—The Secretary shall provide facility conversion
11 funding awards under this section to automobile manufac-
12 turers and component suppliers to pay not more than 30
13 percent of the cost of—

14 (1) reequipping or expanding an existing manu-
15 facturing facility in the United States to produce—

16 (A) qualifying advanced technology vehi-
17 cles; or

18 (B) qualifying components; and

19 (2) engineering integration performed in the
20 United States of qualifying vehicles and qualifying
21 components.

22 (c) PERIOD OF AVAILABILITY.—An award under sub-
23 section (b) shall apply to—

24 (1) facilities and equipment placed in service
25 before December 30, 2017; and

1 (2) engineering integration costs incurred dur-
 2 ing the period beginning on the date of enactment
 3 of this Act and ending on December 30, 2017.

4 (d) IMPROVEMENT.—The Secretary shall issue regu-
 5 lations that require that, in order for an automobile manu-
 6 facturer to be eligible for an award under this section dur-
 7 ing a particular year, the adjusted average fuel economy
 8 of the manufacturer for light duty vehicles produced by
 9 the manufacturer during the most recent year for which
 10 data are available shall be not less than the average fuel
 11 economy for all light duty vehicles of the manufacturer
 12 for model year 2002.

13 **SEC. 304. ENERGY STORAGE COMPETITIVENESS.**

14 (a) SHORT TITLE.—This section may be cited as the
 15 “United States Energy Storage Competitiveness Act of
 16 2007”.

17 (b) ENERGY STORAGE SYSTEMS FOR MOTOR TRANS-
 18 PORTATION AND ELECTRICITY TRANSMISSION AND DIS-
 19 TRIBUTION.—

20 (1) DEFINITIONS.—In this subsection:

21 (A) COUNCIL.—The term “Council” means
 22 the Energy Storage Advisory Council estab-
 23 lished under paragraph (3).

24 (B) COMPRESSED AIR ENERGY STOR-
 25 AGE.—The term “compressed air energy stor-

age” means, in the case of an electricity grid application, the storage of energy through the compression of air.

(C) DEPARTMENT.—The term “Department” means the Department of Energy.

(D) FLYWHEEL.—The term “flywheel” means, in the case of an electricity grid application, a device used to store rotational kinetic energy.

(E) ULTRACAPACITOR.—The term “ultracapacitor” means an energy storage device that has a power density comparable to conventional capacitors but capable of exceeding the energy density of conventional capacitors by several orders of magnitude.

(2) PROGRAM.—The Secretary shall carry out a research, development, and demonstration program to support the ability of the United States to remain globally competitive in energy storage systems for motor transportation and electricity transmission and distribution.

(3) ENERGY STORAGE ADVISORY COUNCIL.—

(A) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act,

1 the Secretary shall establish an Energy Storage
2 Advisory Council.

3 (B) COMPOSITION.—

4 (i) IN GENERAL.—Subject to clause
5 (ii), the Council shall consist of not less
6 than 15 individuals appointed by the Sec-
7 retary, based on recommendations of the
8 National Academy of Sciences.

9 (ii) ENERGY STORAGE INDUSTRY.—

10 The Council shall consist primarily of rep-
11 resentatives of the energy storage industry
12 of the United States.

13 (iii) CHAIRPERSON.—The Secretary
14 shall select a Chairperson for the Council
15 from among the members appointed under
16 clause (i)

17 (C) MEETINGS.—

18 (i) IN GENERAL.—The Council shall
19 meet not less than once a year.

20 (ii) FEDERAL ADVISORY COMMITTEE
21 ACT.—The Federal Advisory Committee
22 Act (5 U.S.C. App. 2) shall apply to a
23 meeting of the Council.

24 (D) PLANS.—No later than 1 year after
25 the date of enactment of this Act, in conjunc-

tion with the Secretary, the Council shall develop 5-year plans for integrating basic and applied research so that the United States retains a globally competitive domestic energy storage industry for motor transportation and electricity transmission and distribution.

(E) REVIEW.—The Council shall—

(i) assess the performance of the Department in meeting the goals of the plans developed under subparagraph (D); and

(ii) make specific recommendations to the Secretary on programs or activities that should be established or terminated to meet those goals.

(4) BASIC RESEARCH PROGRAM.—

(A) BASIC RESEARCH.—The Secretary shall conduct a basic research program on energy storage systems to support motor transportation and electricity transmission and distribution, including—

(i) materials design;

(ii) materials synthesis and characterization;

(iii) electrolytes, including bioelectrolytes;

1 (iv) surface and interface dynamics;

2 and

3 (v) modeling and simulation.

4 (B) NANOSCIENCE CENTERS.—The Sec-
5 retary shall ensure that the nanoscience centers
6 of the Department—

7 (i) support research in the areas de-
8 scribed in subparagraph (A), as part of the
9 mission of the centers; and

10 (ii) coordinate activities of the centers
11 with activities of the Council.

12 (5) APPLIED RESEARCH PROGRAM.—The Sec-
13 retary shall conduct an applied research program on
14 energy storage systems to support motor transpor-
15 tation and electricity transmission and distribution
16 technologies, including—

17 (A) ultracapacitors;

18 (B) flywheels;

19 (C) compressed air energy systems;

20 (D) power conditioning electronics; and

21 (E) manufacturing technologies for energy
22 storage systems.

23 (6) ENERGY STORAGE RESEARCH CENTERS.—

24 (A) IN GENERAL.—The Secretary shall es-
25 tablish, through competitive bids, 4 energy stor-

1 age research centers to translate basic research
2 into applied technologies to advance the capa-
3 bility of the United States to maintain a glob-
4 ally competitive posture in energy storage sys-
5 tems for motor transportation and electricity
6 transmission and distribution.

7 (B) PROGRAM MANAGEMENT.—The centers
8 shall be jointly managed by the Under Sec-
9 retary for Science and the Under Secretary of
10 Energy of the Department.

11 (C) PARTICIPATION AGREEMENTS.—As a
12 condition of participating in a center, a partici-
13 pant shall enter into a participation agreement
14 with the center that requires that activities con-
15 ducted by the participant for the center pro-
16 mote the goal of enabling the United States to
17 compete successfully in global energy storage
18 markets.

19 (D) PLANS.—A center shall conduct activi-
20 ties that promote the achievement of the goals
21 of the plans of the Council under paragraph
22 (3)(D).

23 (E) COST SHARING.—In carrying out this
24 paragraph, the Secretary shall require cost-

1 sharing in accordance with section 988 of the
 2 Energy Policy Act of 2005 (42 U.S.C. 16352).

3 (F) NATIONAL LABORATORIES.—A na-
 4 tional laboratory (as defined in section 2 of the
 5 Energy Policy Act 2005 (42 U.S.C. 15801))
 6 may participate in a center established under
 7 this paragraph as part of a cooperative research
 8 and development agreement (as defined in sec-
 9 tion 12(d) of the Stevenson-Wydler Technology
 10 Innovation Act of 1980 (15 U.S.C. 3710a(d))).

11 (G) INTELLECTUAL PROPERTY.—A partici-
 12 pant in a center under this paragraph shall
 13 have a royalty-free, exclusive nontransferable li-
 14 cense to intellectual property that the center in-
 15 vents from funding received under this sub-
 16 section.

17 (7) REVIEW BY NATIONAL ACADEMY OF
 18 SCIENCES.—Not later than 5 years after the date of
 19 enactment of this Act, the Secretary shall offer to
 20 enter into an arrangement with the National Acad-
 21 emy of Sciences to assess the performance of the
 22 Department in making the United States globally
 23 competitive in energy storage systems for motor
 24 transportation and electricity transmission and dis-
 25 tribution.

1 (8) AUTHORIZATION OF APPROPRIATIONS.—

2 There are authorized to be appropriated to carry
3 out—

4 (A) the basic research program under
5 paragraph (4) \$50,000,000 for each of fiscal
6 years 2008 through 2017;

7 (B) the applied research program under
8 paragraph (5) \$80,000,000 for each of fiscal
9 years 2008 through 2017; and;

10 (C) the energy storage research center pro-
11 gram under paragraph (6) \$100,000,000 for
12 each of fiscal years 2008 through 2017.

13 (c) ADVANCED BATTERY AND ELECTRIC VEHICLE
14 TECHNOLOGY PROGRAM.—

15 (1) DEFINITIONS.—In this subsection:

16 (A) BATTERY.—The term “battery” means
17 an electrochemical energy storage device pow-
18 ered directly by electrical current.

19 (B) ELECTRIC DRIVE TRANSPORTATION
20 TECHNOLOGY.—The term “electric drive trans-
21 portation technology” means vehicle systems
22 that use stored electrical energy to provide mo-
23 tive power, including electric motors and
24 drivetrain systems.

1 (2) PROGRAM.—The Secretary shall conduct a
2 program of research, development, demonstration,
3 and commercial application for batteries and electric
4 drive transportation technology, including—

5 (A) batteries;

6 (B) on-board and off-board charging com-
7 ponents;

8 (C) drivetrain systems;

9 (D) vehicles systems integration; and

10 (E) control systems, including systems that
11 optimize for—

12 (i) prolonging battery life;

13 (ii) reduction of petroleum consump-
14 tion; and

15 (iii) reduction of fossil fuel emissions.

16 (3) AUTHORIZATION OF APPROPRIATIONS.—

17 There is authorized to be appropriated to carry out
18 this subsection \$200,000,000 for each of fiscal years
19 2007 through 2012.

1 **TITLE IV—SETTING ENERGY**
2 **EFFICIENCY GOALS**

3 **SEC. 401. NATIONAL GOALS FOR ENERGY SAVINGS IN**
4 **TRANSPORTATION.**

5 (a) GOALS.—The goals of the United States are to
6 reduce gasoline usage in the United States from the levels
7 projected under subsection (b) by—

8 (1) 20 percent by calendar year 2017;

9 (2) 35 percent by calendar year 2025; and

10 (3) 45 percent by calendar year 2030.

11 (b) MEASUREMENT.—For purposes of subsection (a),
12 reduction in gasoline usage shall be measured from the
13 estimates for each year in subsection (a) contained in the
14 reference case in the report of the Energy Information Ad-
15 ministration entitled “Annual Energy Outlook 2007”.

16 (c) STRATEGIC PLAN.—

17 (1) IN GENERAL.—Not later than 1 year after
18 the date of enactment of this Act, the Secretary, in
19 cooperation with the Administrator of the Environ-
20 mental Protection Agency and the heads of other ap-
21 propriate Federal agencies, shall develop a strategic
22 plan to achieve the national goals for reduction in
23 gasoline usage established under subsection (a).

1 (2) PUBLIC INPUT AND COMMENT.—The Sec-
2 retary shall develop the plan in a manner that pro-
3 vides appropriate opportunities for public comment.

4 (d) PLAN CONTENTS.—The strategic plan shall—

5 (1) establish future regulatory, funding, and
6 policy priorities to ensure compliance with the na-
7 tional goals;

8 (2) include energy savings estimates for each
9 sector; and

10 (3) include data collection methodologies and
11 compilations used to establish baseline and energy
12 savings data.

13 (e) PLAN UPDATES.—

14 (1) IN GENERAL.—The Secretary shall—

15 (A) update the strategic plan biennially;
16 and

17 (B) include the updated strategic plan in
18 the national energy policy plan required by sec-
19 tion 801 of the Department of Energy Organi-
20 zation Act (42 U.S.C. 7321).

21 (2) CONTENTS.—In updating the plan, the Sec-
22 retary shall—

23 (A) report on progress made toward imple-
24 menting efficiency policies to achieve the na-

1 tional goals established under subsection (a);
 2 and

3 (B) to the maximum extent practicable,
 4 verify energy savings resulting from the poli-
 5 cies.

6 (f) REPORT TO CONGRESS AND PUBLIC.—The Sec-
 7 retary shall submit to Congress, and make available to the
 8 public, the initial strategic plan developed under sub-
 9 section (c) and each updated plan.

10 **SEC. 402. NATIONAL ENERGY EFFICIENCY IMPROVEMENT**
 11 **GOALS.**

12 (a) GOALS.—The goals of the United States are—

13 (1) to achieve an improvement in the overall en-
 14 ergy productivity of the United States (measured in
 15 gross domestic product per unit of energy input) of
 16 at least 2.5 percent per year by the year 2012; and

17 (2) to maintain that annual rate of improve-
 18 ment each year through 2030.

19 (b) STRATEGIC PLAN.—

20 (1) IN GENERAL.—Not later than 1 year after
 21 the date of enactment of this Act, the Secretary, in
 22 cooperation with the Administrator of the Environ-
 23 mental Protection Agency and the heads of other ap-
 24 propriate Federal agencies, shall develop a strategic
 25 plan to achieve the national goals for improvement

1 in energy productivity established under subsection
2 (a).

3 (2) PUBLIC INPUT AND COMMENT.—The Sec-
4 retary shall develop the plan in a manner that pro-
5 vides appropriate opportunities for public input and
6 comment.

7 (c) PLAN CONTENTS.—The strategic plan shall—

8 (1) establish future regulatory, funding, and
9 policy priorities to ensure compliance with the na-
10 tional goals;

11 (2) include energy savings estimates for each
12 sector; and

13 (3) include data collection methodologies and
14 compilations used to establish baseline and energy
15 savings data.

16 (d) PLAN UPDATES.—

17 (1) IN GENERAL.—The Secretary shall—

18 (A) update the strategic plan biennially;
19 and

20 (B) include the updated strategic plan in
21 the national energy policy plan required by sec-
22 tion 801 of the Department of Energy Organi-
23 zation Act (42 U.S.C. 7321).

24 (2) CONTENTS.—In updating the plan, the Sec-
25 retary shall—

1 (A) report on progress made toward imple-
 2 menting efficiency policies to achieve the na-
 3 tional goals established under subsection (a);
 4 and

5 (B) verify, to the maximum extent prac-
 6 ticable, energy savings resulting from the poli-
 7 cies.

8 (e) REPORT TO CONGRESS AND PUBLIC.—The Sec-
 9 retary shall submit to Congress, and make available to the
 10 public, the initial strategic plan developed under sub-
 11 section (b) and each updated plan.

12 (f) NATIONAL ACTION PLAN ON ENERGY EFFI-
 13 CIENCY.—The Administrator of the Environmental Pro-
 14 tection Agency and the Secretary, with the heads of other
 15 Federal agencies as appropriate, shall continue to support
 16 maintenance and updating of the National Action Plan on
 17 Energy Efficiency to help inform the development of the
 18 strategic plan under subsection (b).

19 **SEC. 403. NATIONWIDE MEDIA CAMPAIGN TO INCREASE EN-**
 20 **ERGY EFFICIENCY.**

21 (a) IN GENERAL.—The Secretary, acting through the
 22 Assistant Secretary for Energy Efficiency and Renewable
 23 Energy (referred to in this section as the “Secretary”),
 24 shall develop and conduct a national media campaign for

1 the purpose of increasing energy efficiency throughout the
 2 economy of the United States over the next decade.

3 (b) CONTRACT WITH ENTITY.—The Secretary shall
 4 carry out subsection (a) directly or through—

5 (1) competitively bid contracts with 1 or more
 6 nationally recognized media firms for the develop-
 7 ment and distribution of monthly television, radio,
 8 and newspaper public service announcements; or

9 (2) collective agreements with 1 or more nation-
 10 ally recognized institutes, businesses, or nonprofit
 11 organizations for the funding, development, and dis-
 12 tribution of monthly television, radio, and newspaper
 13 public service announcements.

14 (c) USE OF FUNDS.—

15 (1) IN GENERAL.—Amounts made available to
 16 carry out this section shall be used for the following:

17 (A) ADVERTISING COSTS.—

18 (i) The purchase of media time and
 19 space.

20 (ii) Creative and talent costs.

21 (iii) Testing and evaluation of adver-
 22 tising.

23 (iv) Evaluation of the effectiveness of
 24 the media campaign.

1 (v) The negotiated fees for the win-
 2 ning bidder on requests from proposals
 3 issued either by the Secretary for purposes
 4 otherwise authorized in this section.

5 (vi) Entertainment industry outreach,
 6 interactive outreach, media projects and
 7 activities, public information, news media
 8 outreach, and corporate sponsorship and
 9 participation.

10 (B) ADMINISTRATIVE COSTS.—Operational
 11 and management expenses.

12 (2) LIMITATIONS.—In carrying out this section,
 13 the Secretary shall allocate not less than 85 percent
 14 of funds made available under subsection (e) for
 15 each fiscal year for the advertising functions speci-
 16 fied under paragraph (1)(A).

17 (d) REPORTS.—The Secretary shall annually submit
 18 to Congress a report that describes—

19 (1) the strategy of the national media campaign
 20 and whether specific objectives of the campaign were
 21 accomplished, including—

22 (A) determinations concerning the rate of
 23 change of energy consumption, in both absolute
 24 and per capita terms; and

1 (B) an evaluation that enables consider-
2 ation whether the media campaign contributed
3 to reduction of energy consumption;

4 (2) steps taken to ensure that the national
5 media campaign operates in an effective and effi-
6 cient manner consistent with the overall strategy
7 and focus of the campaign;

8 (3) plans to purchase advertising time and
9 space;

10 (4) policies and practices implemented to ensure
11 that Federal funds are used responsibly to purchase
12 advertising time and space and eliminate the poten-
13 tial for waste, fraud, and abuse; and

14 (5) all contracts or cooperative agreements en-
15 tered into with a corporation, partnership, or indi-
16 vidual working on behalf of the national media cam-
17 paign.

18 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
19 authorized to be appropriated to carry out this section
20 \$5,000,000 for each of fiscal years 2008 through 2012.

1 **TITLE V—PROMOTING FEDERAL**
2 **LEADERSHIP IN ENERGY EF-**
3 **FICIENCY AND RENEWABLE**
4 **ENERGY**

5 **SEC. 501. FEDERAL FLEET CONSERVATION REQUIRE-**
6 **MENTS.**

7 (a) FEDERAL FLEET CONSERVATION REQUIRE-
8 MENTS.—

9 (1) IN GENERAL.—Part J of title III of the En-
10 ergy Policy and Conservation Act (42 U.S.C. 6374
11 et seq.) is amended by adding at the end the fol-
12 lowing:

13 **“SEC. 400FF. FEDERAL FLEET CONSERVATION REQUIRE-**
14 **MENTS.**

15 “(a) MANDATORY REDUCTION IN PETROLEUM CON-
16 SUMPTION.—

17 “(1) IN GENERAL.—The Secretary shall issue
18 regulations for Federal fleets subject to section
19 400AA requiring that not later than October 1,
20 2015, each Federal agency achieve at least a 20 per-
21 cent reduction in petroleum consumption, and that
22 each Federal agency increase alternative fuel con-
23 sumption by 10 percent annually, as calculated from
24 the baseline established by the Secretary for fiscal
25 year 2005.

1 “(2) PLAN.—

2 “(A) REQUIREMENT.—The regulations
3 shall require each Federal agency to develop a
4 plan to meet the required petroleum reduction
5 levels and the alternative fuel consumption in-
6 creases.

7 “(B) MEASURES.—The plan may allow an
8 agency to meet the required petroleum reduc-
9 tion level through—

10 “(i) the use of alternative fuels;

11 “(ii) the acquisition of vehicles with
12 higher fuel economy, including hybrid vehi-
13 cles and plug-in hybrid vehicles if the vehi-
14 cles are commercially available;

15 “(iii) the substitution of cars for light
16 trucks;

17 “(iv) an increase in vehicle load fac-
18 tors;

19 “(v) a decrease in vehicle miles trav-
20 eled;

21 “(vi) a decrease in fleet size; and

22 “(vii) other measures.

23 “(b) FEDERAL EMPLOYEE INCENTIVE PROGRAMS
24 FOR REDUCING PETROLEUM CONSUMPTION.—

1 “(1) IN GENERAL.—Each Federal agency shall
 2 actively promote incentive programs that encourage
 3 Federal employees and contractors to reduce petro-
 4 leum through the use of practices such as—

5 “(A) telecommuting;

6 “(B) public transit;

7 “(C) carpooling; and

8 “(D) bicycling.

9 “(2) MONITORING AND SUPPORT FOR INCEN-
 10 TIVE PROGRAMS.—The Administrator of General
 11 Services, the Director of the Office of Personnel
 12 Management, and the Secretary of Energy shall
 13 monitor and provide appropriate support to agency
 14 programs described in paragraph (1).

15 “(3) RECOGNITION.—The Secretary may estab-
 16 lish a program under which the Secretary recognizes
 17 private sector employers and State and local govern-
 18 ments for outstanding programs to reduce petroleum
 19 usage through practices described in paragraph (1).

20 “(c) REPLACEMENT TIRES.—

21 “(1) IN GENERAL.—Except as provided in para-
 22 graph (2), the regulations issued under subsection
 23 (a)(1) shall include a requirement that, to the max-
 24 imum extent practicable, each Federal agency pur-

1 chase energy-efficient replacement tires for the re-
 2 spective fleet vehicles of the agency.

3 “(2) EXCEPTIONS.—This section does not apply
 4 to—

5 “(A) law enforcement motor vehicles;

6 “(B) emergency motor vehicles; or

7 “(C) motor vehicles acquired and used for
 8 military purposes that the Secretary of Defense
 9 has certified to the Secretary must be exempt
 10 for national security reasons.

11 “(d) ANNUAL REPORTS ON COMPLIANCE.—The Sec-
 12 retary shall submit to Congress an annual report that
 13 summarizes actions taken by Federal agencies to comply
 14 with this section.”.

15 (2) TABLE OF CONTENTS AMENDMENT.—The
 16 table of contents of the Energy Policy and Conserva-
 17 tion Act (42 U.S.C. prec. 6201) is amended by add-
 18 ing at the end of the items relating to part J of title
 19 III the following:

“Sec. 400FF. Federal fleet conservation requirements.”.

20 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
 21 authorized to be appropriated to carry out the amendment
 22 made by this section \$10,000,000 for the period of fiscal
 23 years 2008 through 2013.

1 **SEC. 502. FEDERAL REQUIREMENT TO PURCHASE ELEC-**
2 **TRICITY GENERATED BY RENEWABLE EN-**
3 **ERGY.**

4 Section 203 of the Energy Policy Act of 2005 (42
5 U.S.C. 15852) is amended by striking subsection (a) and
6 inserting the following:

7 “(a) REQUIREMENT.—

8 “(1) IN GENERAL.—The President, acting
9 through the Secretary, shall ensure that, of the total
10 quantity of domestic electric energy the Federal
11 Government consumes during any fiscal year, the
12 following percentages shall be renewable energy from
13 facilities placed in service after January 1, 1999:

14 “(A) Not less than 10 percent in fiscal
15 year 2010.

16 “(B) Not less than 15 percent in fiscal
17 year 2015.

18 “(2) CAPITOL COMPLEX.—The Architect of the
19 Capitol, in consultation with the Secretary, shall en-
20 sure that, of the total quantity of electric energy the
21 Capitol complex consumes during any fiscal year, the
22 percentages prescribed in paragraph (1) shall be re-
23 newable energy.

24 “(3) WAIVER AUTHORITY.—The President may
25 reduce or waive the requirement under paragraph
26 (1) on an annual basis, if the President determines

1 that the average governmentwide cost per kilowatt
 2 hour of complying with paragraph (1) will be more
 3 than 50 percent higher than the average govern-
 4 mentwide cost per kilowatt-hour for electric energy
 5 in the preceding year.”.

6 **SEC. 503. ENERGY SAVINGS PERFORMANCE CONTRACTS.**

7 (a) RETENTION OF SAVINGS.—Section 546(c) of the
 8 National Energy Conservation Policy Act (42 U.S.C.
 9 8256(c)) is amended by striking paragraph (5).

10 (b) FINANCING FLEXIBILITY.—Section 801(a)(2) of
 11 the National Energy Conservation Policy Act (42 U.S.C.
 12 8287(a)(2)) is amended by adding at the end the fol-
 13 lowing:

14 “(E) SEPARATE CONTRACTS.—In carrying
 15 out a contract under this title, a Federal agency
 16 may—

17 “(i) enter into a separate contract for
 18 energy services and conservation measures
 19 under the contract; and

20 “(ii) provide all or part of the financ-
 21 ing necessary to carry out the contract.”.

22 (c) SUNSET AND REPORTING REQUIREMENTS.—Sec-
 23 tion 801 of the National Energy Conservation Policy Act
 24 (42 U.S.C. 8287) is amended by striking subsection (c).

1 (d) DEFINITION OF ENERGY SAVINGS.—Section
 2 804(2) of the National Energy Conservation Policy Act
 3 (42 U.S.C. 8287c(2)) is amended—

4 (1) by redesignating subparagraphs (A), (B),
 5 and (C) as clauses (i), (ii), and (iii), respectively,
 6 and indenting appropriately;

7 (2) by striking “means a reduction” and insert-
 8 ing “means—

9 “(A) a reduction”;

10 (3) by striking the period at the end and insert-
 11 ing a semicolon; and

12 (4) by adding at the end the following:

13 “(B) the increased efficient use of an exist-
 14 ing energy source by cogeneration or heat re-
 15 covery, and installation of renewable energy sys-
 16 tems;

17 “(C) the sale or transfer of electrical or
 18 thermal energy generated on-site, but in excess
 19 of Federal needs, to utilities or non-Federal en-
 20 ergy users; and

21 “(D) the increased efficient use of existing
 22 water sources in interior or exterior applica-
 23 tions.”.

24 (e) ENERGY AND COST SAVINGS IN NONBUILDING
 25 APPLICATIONS.—

1 (1) DEFINITIONS.—In this subsection:

2 (A) NONBUILDING APPLICATION.—The
3 term “nonbuilding application” means—

4 (i) any class of vehicles, devices, or
5 equipment that is transportable under the
6 power of the applicable vehicle, device, or
7 equipment by land, sea, or air and that
8 consumes energy from any fuel source for
9 the purpose of—

10 (I) that transportation; or

11 (II) maintaining a controlled en-
12 vironment within the vehicle, device,
13 or equipment; and

14 (ii) any federally-owned equipment
15 used to generate electricity or transport
16 water.

17 (B) SECONDARY SAVINGS.—

18 (i) IN GENERAL.—The term “sec-
19 ondary savings” means additional energy
20 or cost savings that are a direct con-
21 sequence of the energy savings that result
22 from the energy efficiency improvements
23 that were financed and implemented pur-
24 suant to an energy savings performance
25 contract.

1 (ii) INCLUSIONS.—The term “sec-
2 ondary savings” includes—

3 (I) energy and cost savings that
4 result from a reduction in the need
5 for fuel delivery and logistical support;

6 (II) personnel cost savings and
7 environmental benefits; and

8 (III) in the case of electric gen-
9 eration equipment, the benefits of in-
10 creased efficiency in the production of
11 electricity, including revenues received
12 by the Federal Government from the
13 sale of electricity so produced.

14 (2) STUDY.—

15 (A) IN GENERAL.—As soon as practicable
16 after the date of enactment of this Act, the Sec-
17 retary and the Secretary of Defense shall joint-
18 ly conduct, and submit to Congress and the
19 President a report of, a study of the potential
20 for the use of energy savings performance con-
21 tracts to reduce energy consumption and pro-
22 vide energy and cost savings in nonbuilding ap-
23 plications.

24 (B) REQUIREMENTS.—The study under
25 this subsection shall include—

1 (i) an estimate of the potential energy
 2 and cost savings to the Federal Govern-
 3 ment, including secondary savings and
 4 benefits, from increased efficiency in non-
 5 building applications;

6 (ii) an assessment of the feasibility of
 7 extending the use of energy savings per-
 8 formance contracts to nonbuilding applica-
 9 tions, including an identification of any
 10 regulatory or statutory barriers to such
 11 use; and

12 (iii) such recommendations as the
 13 Secretary and Secretary of Defense deter-
 14 mine to be appropriate.

15 **SEC. 504. ENERGY MANAGEMENT REQUIREMENTS FOR**
 16 **FEDERAL BUILDINGS.**

17 Section 543(a)(1) of the National Energy Conserva-
 18 tion Policy Act (42 U.S.C. 8253(a)(1)) is amended by
 19 striking the table and inserting the following:

“Fiscal Year	Percentage reduction
2006	2
2007	4
2008	9
2009	12
2010	15
2011	18
2012	21
2013	24
2014	27
2015	30.”.

1 **SEC. 505. COMBINED HEAT AND POWER AND DISTRICT EN-**
2 **ERGY INSTALLATIONS AT FEDERAL SITES.**

3 Section 543 of the National Energy Conservation
4 Policy Act (42 U.S.C. 8253) is amended by adding at the
5 end the following:

6 “(f) COMBINED HEAT AND POWER AND DISTRICT
7 ENERGY INSTALLATIONS AT FEDERAL SITES.—

8 “(1) IN GENERAL.—Not later than 1 year after
9 the date of enactment of this subsection, the Sec-
10 retary, in consultation with the Administrator of
11 General Services and the Secretary of Defense, shall
12 identify Federal sites that could achieve significant
13 cost-effective energy savings through the use of com-
14 bined heat and power or district energy installations.

15 “(2) INFORMATION AND TECHNICAL ASSIST-
16 ANCE.—The Secretary shall provide agencies with
17 information and technical assistance that will enable
18 the agencies to take advantage of the energy savings
19 described in paragraph (1).

20 “(3) ENERGY PERFORMANCE REQUIRE-
21 MENTS.—Any energy savings from the installations
22 described in paragraph (1) may be applied to meet
23 the energy performance requirements for an agency
24 under subsection (a)(1).”.

1 **SEC. 506. FEDERAL BUILDING ENERGY EFFICIENCY PER-**
 2 **FORMANCE STANDARDS.**

3 Section 305(a)(3) of the Energy Conservation and
 4 Production Act (42 U.S.C. 6834(a)(3)) is amended by
 5 striking “(3)(A)” and all that follows through the end of
 6 subparagraph (A) and inserting the following:

7 “(3) FEDERAL BUILDING ENERGY EFFICIENCY
 8 PERFORMANCE STANDARDS.—

9 “(A) IN GENERAL.—Not later than 1 year
 10 after the date of enactment of the Energy Effi-
 11 ciency Promotion Act of 2007, the Secretary
 12 shall establish, by rule, revised Federal building
 13 energy efficiency performance standards that
 14 require that:

15 “(i) For new Federal buildings and
 16 Federal buildings undergoing major ren-
 17 ovations:

18 “(I) The buildings be designed to
 19 achieve energy consumption levels
 20 that are at least 30 percent below the
 21 levels established in the version of the
 22 ASHRAE Standard or the Inter-
 23 national Energy Conservation Code,
 24 as appropriate, that is in effect as of
 25 the date of enactment of the Energy
 26 Efficiency Promotion Act of 2007.

1 “(II) The buildings be designed
2 so that the fossil fuel-generated en-
3 ergy consumption of the buildings is
4 reduced, as compared with the fossil
5 fuel-generated energy consumption by
6 a similar Federal building in fiscal
7 year 2003 (as measured by Commer-
8 cial Buildings Energy Consumption
9 Survey or Residential Energy Con-
10 sumption Survey data from the En-
11 ergy Information Agency), by the per-
12 centage specified in the following
13 table:

“Fiscal Year	Percentage Reduction
2007	50
2010	60
2015	70
2020	80
2025	90
2030	100.

14 “(III) Sustainable design prin-
15 ciples are applied to the siting, design,
16 and construction of all new and re-
17 placement buildings and major ren-
18 ovations of buildings.

19 “(ii) If water is used to achieve en-
20 ergy efficiency, water conservation tech-
21 nologies shall be applied to the extent that

1 the technologies are life-cycle cost-effec-
2 tive.”.

3 **SEC. 507. APPLICATION OF INTERNATIONAL ENERGY CON-**
4 **SERVATION CODE TO PUBLIC AND ASSISTED**
5 **HOUSING.**

6 Section 109 of the Cranston-Gonzalez National Af-
7 fordable Housing Act (42 U.S.C. 12709) is amended—

8 (1) in subsection (a)(2), by striking “the Coun-
9 cil of American” and all that follows through
10 “2003” and inserting “the 2006”;

11 (2) in subsection (b)—

12 (A) in the heading, by striking “MODEL
13 ENERGY CODE.—” and inserting “INTER-
14 NATIONAL ENERGY CONSERVATION CODE.—”;
15 and

16 (B) by striking “CABO” and all that fol-
17 lows through “2003” and inserting “the 2006”;

18 (3) in subsection (c)—

19 (A) in the heading, by striking “MODEL
20 ENERGY CODE AND”; and

21 (B) by striking “CABO” and all that fol-
22 lows through “2003” and inserting “the 2006”;

23 and

24 (4) by adding at the end the following:

1 “(d) FAILURE TO AMEND THE STANDARDS.—Not
 2 later than 1 year after the requirements of the 2006 Inter-
 3 national Energy Conservation Code are revised, if the Sec-
 4 retaries have not amended the energy efficiency standards
 5 under this section or made a determination under sub-
 6 section (c), and if the Secretary of Energy has made a
 7 determination under section 304 of the Energy Conserva-
 8 tion and Production Act (42 U.S.C. 6833) that such re-
 9 vised International Energy Conservation Code would im-
 10 prove energy efficiency, all new construction of housing
 11 described in subsection (a) shall meet the requirements of
 12 such revised International Energy Conservation Code.”.

13 **TITLE VI—ASSISTING STATE AND**
 14 **LOCAL GOVERNMENTS IN EN-**
 15 **ERGY EFFICIENCY**

16 **SEC. 601. WEATHERIZATION ASSISTANCE FOR LOW-INCOME**
 17 **PERSONS.**

18 Section 422 of the Energy Conservation and Produc-
 19 tion Act (42 U.S.C. 6872) is amended by striking
 20 “\$700,000,000 for fiscal year 2008” and inserting
 21 “\$750,000,000 for each of fiscal years 2008 through
 22 2012”.

23 **SEC. 602. STATE ENERGY CONSERVATION PLANS.**

24 Section 365(f) of the Energy Policy and Conservation
 25 Act (42 U.S.C. 6325(f)) is amended by striking “fiscal

1 year 2008” and inserting “each of fiscal years 2008
2 through 2012”.

3 **SEC. 603. UTILITY ENERGY EFFICIENCY PROGRAMS.**

4 (a) ELECTRIC UTILITIES.—Section 111(d) of the
5 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
6 2621(d)) is amended by adding at the end the following:

7 “(16) INTEGRATED RESOURCE PLANNING.—

8 Each electric utility shall—

9 “(A) integrate energy efficiency resources
10 into utility, State, and regional plans; and

11 “(B) adopt policies establishing cost-effec-
12 tive energy efficiency as a priority resource.

13 “(17) RATE DESIGN MODIFICATIONS TO PRO-

14 MOTE ENERGY EFFICIENCY INVESTMENTS.—

15 “(A) IN GENERAL.—The rates allowed to
16 be charged by any electric utility shall—

17 “(i) align utility incentives with the
18 delivery of cost-effective energy efficiency;

19 and

20 “(ii) promote energy efficiency invest-
21 ments.

22 “(B) POLICY OPTIONS.—In complying with
23 subparagraph (A), each State regulatory au-
24 thority and each nonregulated utility shall con-
25 sider—

1 “(i) removing the throughput incen-
 2 tive and other regulatory and management
 3 disincentives to energy efficiency;

4 “(ii) providing utility incentives for
 5 the successful management of energy effi-
 6 ciency programs;

7 “(iii) including the impact on adoption
 8 of energy efficiency as 1 of the goals of re-
 9 tail rate design, recognizing that energy ef-
 10 ficiency must be balanced with other objec-
 11 tives;

12 “(iv) adopting rate designs that en-
 13 courage energy efficiency for each cus-
 14 tomer class; and

15 “(v) allowing timely recovery of en-
 16 ergy efficiency-related costs.”.

17 (b) NATURAL GAS UTILITIES.—Section 303(b) of the
 18 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
 19 3203(b)) is amended by adding at the end the following:

20 “(5) ENERGY EFFICIENCY.—Each natural gas
 21 utility shall—

22 “(A) integrate energy efficiency resources
 23 into the plans and planning processes of the
 24 natural gas utility; and

1 “(B) adopt policies that establish energy
 2 efficiency as a priority resource in the plans
 3 and planning processes of the natural gas util-
 4 ity.

5 “(6) RATE DESIGN MODIFICATIONS TO PRO-
 6 MOTE ENERGY EFFICIENCY INVESTMENTS.—

7 “(A) IN GENERAL.—The rates allowed to
 8 be charged by a natural gas utility shall align
 9 utility incentives with the deployment of cost-ef-
 10 fective energy efficiency.

11 “(B) POLICY OPTIONS.—In complying with
 12 subparagraph (A), each State regulatory au-
 13 thority and each nonregulated utility shall con-
 14 sider—

15 “(i) separating fixed-cost revenue re-
 16 covery from the volume of transportation
 17 or sales service provided to the customer;

18 “(ii) providing to utilities incentives
 19 for the successful management of energy
 20 efficiency programs, such as allowing utili-
 21 ties to retain a portion of the cost-reducing
 22 benefits accruing from the programs;

23 “(iii) promoting the impact on adop-
 24 tion of energy efficiency as 1 of the goals
 25 of retail rate design, recognizing that en-

1 ergy efficiency must be balanced with other
2 objectives; and

3 “(iv) adopting rate designs that en-
4 courage energy efficiency for each cus-
5 tomer class.”.

6 **SEC. 604. ENERGY EFFICIENCY AND DEMAND RESPONSE**
7 **PROGRAM ASSISTANCE.**

8 The Secretary shall provide technical assistance re-
9 garding the design and implementation of the energy effi-
10 ciency and demand response programs established under
11 this title, and the amendments made by this title, to State
12 energy offices, public utility regulatory commissions, and
13 nonregulated utilities through the appropriate national
14 laboratories of the Department of Energy.

15 **SEC. 605. ENERGY AND ENVIRONMENTAL BLOCK GRANT.**

16 (a) DEFINITIONS.—In this section

17 (1) ELIGIBLE ENTITY.—The term “eligible enti-
18 ty” means—

19 (A) a State;

20 (B) an eligible unit of local government
21 within a State; and

22 (C) the District of Columbia.

23 (2) ELIGIBLE UNIT OF LOCAL GOVERNMENT.—

24 The term “eligible unit of local government”
25 means—

1 (A) a city with a population of at least
2 35,000; and

3 (B) a county with a population of at least
4 200,000.

5 (3) STATE.—The term “State” means—

6 (A) each of the several States of the
7 United States;

8 (B) the Commonwealth of Puerto Rico;

9 (C) Guam;

10 (D) American Samoa; and

11 (E) the United States Virgin Islands.

12 (b) PURPOSE.—The purpose of this section is to as-
13 sist State and local governments in implementing strate-
14 gies—

15 (1) to reduce fossil fuel emissions created as a
16 result of activities within the boundaries of the
17 States or units of local government;

18 (2) to reduce the total energy use of the States
19 and units of local government; and

20 (3) to improve energy efficiency in the transpor-
21 tation sector, building sector, and any other appro-
22 priate sectors.

23 (c) PROGRAM.—

24 (1) IN GENERAL.—The Secretary shall provide
25 to eligible entities block grants to carry out eligible

activities (as specified under paragraph (2)) relating to the implementation of environmentally beneficial energy strategies.

(2) ELIGIBLE ACTIVITIES.—The Secretary, in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Transportation, and the Secretary of Housing and Urban Development, shall establish a list of activities that are eligible for assistance under the grant program.

(3) ALLOCATION TO STATES AND ELIGIBLE UNITS OF LOCAL GOVERNMENT.—

(A) IN GENERAL.—Of the amounts made available to provide grants under this subsection, the Secretary shall allocate—

(i) 70 percent to eligible units of local government; and

(ii) 30 percent to States.

(B) DISTRIBUTION TO ELIGIBLE UNITS OF LOCAL GOVERNMENT.—

(i) IN GENERAL.—The Secretary shall establish a formula for the distribution of amounts under subparagraph (A)(i) to eligible units of local government, taking into account any factors that the Secretary determines to be appropriate, including the

1 residential and daytime population of the
2 eligible units of local government.

3 (ii) CRITERIA.—Amounts shall be dis-
4 tributed to eligible units of local govern-
5 ment under clause (i) only if the eligible
6 units of local government meet the criteria
7 for distribution established by the Sec-
8 retary for units of local government.

9 (C) DISTRIBUTION TO STATES.—

10 (i) IN GENERAL.—Of the amounts
11 provided to States under subparagraph
12 (A)(ii), the Secretary shall distribute—

13 (I) at least 1.25 percent to each
14 State; and

15 (II) the remainder among the
16 States, based on a formula, to be de-
17 termined by the Secretary, that takes
18 into account the population of the
19 States and any other criteria that the
20 Secretary determines to be appro-
21 priate.

22 (ii) CRITERIA.—Amounts shall be dis-
23 tributed to States under clause (i) only if
24 the States meet the criteria for distribution
25 established by the Secretary for States.

1 (iii) LIMITATION ON USE OF STATE
 2 FUNDS.—At least 40 percent of the
 3 amounts distributed to States under this
 4 subparagraph shall be used by the States
 5 for the conduct of eligible activities in non-
 6 entitlement areas in the States, in accord-
 7 ance with any criteria established by the
 8 Secretary.

9 (4) REPORT.—Not later than 2 years after the
 10 date on which an eligible entity first receives a grant
 11 under this section, and every 2 years thereafter, the
 12 eligible entity shall submit to the Secretary a report
 13 that describes any eligible activities carried out using
 14 assistance provided under this subsection.

15 (5) AUTHORIZATION OF APPROPRIATIONS.—
 16 There are authorized to be appropriated such sums
 17 as are necessary to carry out this subsection for
 18 each of fiscal years 2008 through 2012.

19 (d) ENVIRONMENTALLY BENEFICIAL ENERGY
 20 STRATEGIES SUPPLEMENTAL GRANT PROGRAM.—

21 (1) IN GENERAL.—The Secretary shall provide
 22 to each eligible entity that meets the applicable cri-
 23 teria under subparagraph (B)(ii) or (C)(ii) of sub-
 24 section (c)(3) a supplemental grant to pay the Fed-
 25 eral share of the total costs of carrying out an eligi-

1 ble activity (as specified under subsection (c)(2)) re-
2 lating to the implementation of an environmentally
3 beneficial energy strategy.

4 (2) REQUIREMENTS.—To be eligible for a grant
5 under paragraph (1), an eligible entity shall—

6 (A) demonstrate to the satisfaction of the
7 Secretary that the eligible entity meets the ap-
8 plicable criteria under subparagraph (B)(ii) or
9 (C)(ii) of subsection (c)(3); and

10 (B) submit to the Secretary for approval a
11 plan that describes the activities to be funded
12 by the grant.

13 (3) COST-SHARING REQUIREMENT.—

14 (A) FEDERAL SHARE.—The Federal share
15 of the cost of carrying out any activities under
16 this subsection shall be 75 percent.

17 (B) NON-FEDERAL SHARE.—

18 (i) FORM.—Not more than 50 percent
19 of the non-Federal share may be in the
20 form of in-kind contributions.

21 (ii) LIMITATION.—Amounts provided
22 to an eligible entity under subsection (c)
23 shall not be used toward the non-Federal
24 share.

1 (4) MAINTENANCE OF EFFORT.—An eligible en-
 2 tity shall provide assurances to the Secretary that
 3 funds provided to the eligible entity under this sub-
 4 section will be used only to supplement, not to sup-
 5 plant, the amount of Federal, State, and local funds
 6 otherwise expended by the eligible entity for eligible
 7 activities under this subsection.

8 (5) AUTHORIZATION OF APPROPRIATIONS.—
 9 There are authorized to be appropriated such sums
 10 as are necessary to carry out this subsection for
 11 each of fiscal years 2008 through 2012.

12 (e) GRANTS TO OTHER STATES AND COMMU-
 13 NITIES.—

14 (1) IN GENERAL.—Of the total amount of funds
 15 that are made available each fiscal year to carry out
 16 this section, the Secretary shall use 2 percent of the
 17 amount to make competitive grants under this sec-
 18 tion to States and units of local government that are
 19 not eligible entities or to consortia of such units of
 20 local government.

21 (2) APPLICATIONS.—To be eligible for a grant
 22 under this subsection, a State, unit of local govern-
 23 ment, or consortia described in paragraph (1) shall
 24 apply to the Secretary for a grant to carry out an

1 activity that would otherwise be eligible for a grant
 2 under subsection (c) or (d).

3 (3) PRIORITY.—In awarding grants under this
 4 subsection, the Secretary shall give priority to—

5 (A) States with populations of less than
 6 2,000,000; and

7 (B) projects that would result in signifi-
 8 cant energy efficiency improvements, reductions
 9 in fossil fuel use, or capital improvements.

10 **SEC. 606. ENERGY SUSTAINABILITY AND EFFICIENCY**
 11 **GRANTS FOR INSTITUTIONS OF HIGHER EDU-**
 12 **CATION.**

13 (a) DEFINITIONS.—In this section:

14 (1) ENERGY SUSTAINABILITY.—The term “en-
 15 ergy sustainability” includes using a renewable en-
 16 ergy resource and a highly efficient technology for
 17 electricity generation, transportation, heating, or
 18 cooling.

19 (2) INSTITUTION OF HIGHER EDUCATION.—The
 20 term “institution of higher education” has the
 21 meaning given the term in section 2 of the Energy
 22 Policy Act of 2005 (42 U.S.C. 15801).

23 (b) GRANTS FOR ENERGY EFFICIENCY IMPROVE-
 24 MENT.—

1 (1) IN GENERAL.—The Secretary shall award
 2 not more than 100 grants to institutions of higher
 3 education to carry out projects to improve energy ef-
 4 ficiency on the grounds and facilities of the institu-
 5 tion of higher education, including not less than 1
 6 grant to an institution of higher education in each
 7 State.

8 (2) CONDITION.—As a condition of receiving a
 9 grant under this subsection, an institution of higher
 10 education shall agree to—

11 (A) implement a public awareness cam-
 12 paign in the community in which the institution
 13 of higher education is located to promote the
 14 project; and

15 (B) submit to the Secretary, and make
 16 available to the public, reports on any improve-
 17 ments achieved as part of a project carried out
 18 under paragraph (1).

19 (c) GRANTS FOR INNOVATION IN ENERGY SUSTAIN-
 20 ABILITY.—

21 (1) IN GENERAL.—The Secretary shall award
 22 not more than 250 grants to institutions of higher
 23 education to engage in innovative energy sustain-
 24 ability projects, including not less than 2 grants to
 25 institutions of higher education in each State.

1 (2) INNOVATION PROJECTS.—An innovation
2 project carried out with a grant under this sub-
3 section shall—

4 (A) involve an innovative technology that is
5 not yet commercially available;

6 (B) have the greatest potential for testing
7 or modeling new technologies or processes; and

8 (C) ensure active student participation in
9 the project, including the planning, implementa-
10 tion, evaluation, and other phases of the
11 project.

12 (3) CONDITION.—As a condition of receiving a
13 grant under this subsection, an institution of higher
14 education shall agree to submit to the Secretary,
15 and make available to the public, reports that de-
16 scribe the results of the projects carried out under
17 paragraph (1).

18 (d) AWARDING OF GRANTS.—

19 (1) APPLICATION.—An institution of higher
20 education that seeks to receive a grant under this
21 section may submit to the Secretary an application
22 for the grant at such time, in such form, and con-
23 taining such information as the Secretary may pre-
24 scribe.

1 (2) SELECTION.—The Secretary shall establish
 2 a committee to assist in the selection of grant recipi-
 3 ents under this section.

4 (e) ALLOCATION TO INSTITUTIONS OF HIGHER EDU-
 5 CATION WITH SMALL ENDOWMENTS.—Of the amount of
 6 grants provided for a fiscal year under this section, the
 7 Secretary shall provide not less 50 percent of the amount
 8 to institutions of higher education that have an endow-
 9 ment of not more than \$100,000,000, with 50 percent of
 10 the allocation set aside for institutions of higher education
 11 that have an endowment of not more than \$50,000,000.

12 (f) GRANT AMOUNTS.—The maximum amount of
 13 grants for a project under this section shall not exceed—

14 (1) in the case of grants for energy efficiency
 15 improvement under subsection (b), \$1,000,000; or.

16 (2) in the case of grants for innovation in en-
 17 ergy sustainability under subsection (c), \$500,000.

18 (g) AUTHORIZATION OF APPROPRIATIONS.—There
 19 are authorized to be appropriated such sums as are nec-
 20 essary to carry out this section for each of fiscal years
 21 2008 through 2012.

22 **SEC. 607. WORKFORCE TRAINING.**

23 Section 1101 of the Energy Policy Act of 2005 (42
 24 U.S.C. 16411) is amended—

1 (1) by redesignating subsection (d) as sub-
2 section (e); and

3 (2) by inserting after subsection (c) the fol-
4 lowing:

5 “(d) WORKFORCE TRAINING.—

6 “(1) IN GENERAL.—The Secretary, in coopera-
7 tion with the Secretary of Labor, shall promulgate
8 regulations to implement a program to provide work-
9 force training to meet the high demand for workers
10 skilled in the energy efficiency and renewable energy
11 industries.

12 “(2) CONSULTATION.—In carrying out this sub-
13 section, the Secretary shall consult with representa-
14 tives of the energy efficiency and renewable energy
15 industries concerning skills that are needed in those
16 industries.”.

17 **SEC. 608. ASSISTANCE TO STATES TO REDUCE SCHOOL BUS**
18 **IDLING.**

19 (a) STATEMENT OF POLICY.—Congress encourages
20 each local educational agency (as defined in section
21 9101(26) of the Elementary and Secondary Education Act
22 of 1965 (20 U.S.C. 7801(26))) that receives Federal funds
23 under the Elementary and Secondary Education Act of
24 1965 (20 U.S.C. 6301 et seq.) to develop a policy to re-

1 duce the incidence of school bus idling at schools while
2 picking up and unloading students.

3 (b) AUTHORIZATION OF APPROPRIATIONS.—There
4 are authorized to be appropriated to the Secretary, work-
5 ing in coordination with the Secretary of Education,
6 \$5,000,000 for each of fiscal years 2007 through 2012
7 for use in educating States and local education agencies
8 about—

9 (1) benefits of reducing school bus idling; and

10 (2) ways in which school bus idling may be re-
11 duced.

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